NATIONAL STACK TESTING GUIDANCE

DISCLAIMER

The discussion in this document is intended solely as guidance. This document is not a regulation, nor is it designed to supercede any stack testing requirements specified in individual NSPS, NESHAP, MACT, state or local regulations. It does not impose legally binding requirements on EPA, states, or the regulated community. This guidance does not confer legal rights or impose legal obligations upon any member of the public. The general description provided here may not apply to a particular situation based on the circumstances. Interested parties are free to raise questions and objections about the application of this guidance to a particular situation. EPA retains the discretion to adopt approaches on a case-by-case basis that differ from those described in this guidance where appropriate. This document may be revised periodically without public notice.

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NATIONAL STACK TESTING GUIDANCE

I INTRODUCTION

· A stack test measures the amount of a specific pollutant or pollutants being emitted through regulated stacks at facilities subject to the requirements of the Clean Air Act (CAA). Stack testing is an important tool used to determine a facility's compliance with emission limits established pursuant to the CAA. However, this tool has not been consistently applied or utilized across the country by the U.S. Environmental Protection Agency (EPA), or delegated state/local agencies. This guidance is intended to address stack tests performed to determine both initial and on-going compliance with the requirements of the CAA.

· A review by the EPA Office of the Inspector General (OIG) ("Report of EPA's Oversight of Stack Testing Programs," 2000-P-00019, September 11, 2000) criticized EPA for not issuing comprehensive national guidance in this area, and not providing sufficient oversight of state/local stack testing programs. The OIG concluded that this lack of guidance and oversight had an adverse effect on the use of stack testing as a tool in determining compliance. As a result of their findings, OIG recommended that EPA develop national guidance that addresses issues such as:

- recommended testing frequencies;
- discrepancies in test procedures; and
- inconsistent reporting of test results.

· In addition to national guidance, the OIG recommended that EPA enhance its oversight program.

· In response to the OIG report, the Office of Enforcement and Compliance Assurance (OECA) made a commitment to address the concerns raised in the report and provide clarification, as necessary, on the issues identified. The Office of Compliance (OC) was given the responsibility for satisfying this commitment.

· The concerns associated with testing frequencies, and the reporting of test results were addressed in the CAA Stationary Source Compliance Monitoring Strategy (CMS) issued by the Agency in April 2001. The Timely And Appropriate Enforcement Response To High Priority Violations Policy (HPV Policy) issued by the Agency in December 1998 provides supplementary reporting guidance by specifying how violations identified through stack testing should be addressed. Each of these documents are summarized below for the reader's convenience; however, for a more thorough understanding of the these policies, we suggest that the reader review the documents in their entirety. An electronic version of CMS can be obtained at: www.epa.gov/compliance/resources/policies/monitoring/cmsguidance.pdf; and the HPV Policy can be obtained at www.epa.gov/compliance/resources/policies/civil/caa/genguid.html.

· This stack testing guidance document was developed to address the remaining issues raised by by the Inspector General, specifically those associated with the conduct of stack tests. A Workgroup with representatives from OECA Headquarters and the EPA Regions was formed to develop the guidance. In formulating this guidance, the Workgroup reviewed all relevant Agency guidance and applicability determinations; evaluated all identified State regulations and guidance on stack testing; and solicited state/local input in various different forums. While this document expands and clarifies existing Agency guidance, it is not intended to change any underlying regulatory requirements.

II GOALS OF THE NATIONAL STACK TESTING GUIDANCE

· Expand upon CMS and the HPV Policy to fully address the concerns raised by the Office of the Inspector General on this issue.

· Improve uniformity on how stack tests are conducted.

· Improve coordination among EPA and state and local agencies.

· Enhance EPA oversight of state/local programs to ensure that the tool of stack testing is being used properly and sufficiently carried out.

III DEFINITION OF STACK TESTING

· Stack testing may be conducted for varying purposes, such as relative accuracy test audits (RATAs), linearity checks, and routine calibration of continuous emission monitoring (CEM) equipment. For purposes of this guidance, stack testing is being narrowly defined as:

- Any standardized procedure of actions using calibrated tools to determine a rate or concentration in order to verify emissions from a source. It does not include visible emission observations.

IV CAA STATIONARY SOURCE COMPLIANCE MONITORING STRATEGY

· The CMS, which addresses certain issues that were raised as concerns in the Inspector General report, was developed in collaboration with the State and Territorial Air Pollution Program Administrators and the Association of Local Air Pollution Control Officials (STAPPA/ALAPCO). It recognizes that consistent, complete and accurate stack test information is critical in managing a national air program. Hence, the CMS recommends:

- States/locals should conduct a stack test, or require the facility to conduct a stack test, whenever they deem appropriate.

- States/locals should conduct a stack test, or require the facility to conduct a stack test,

where there is no other means for determining compliance with the emission limits. In determining whether a stack test is necessary, States/locals should consider factors such as: size of emission unit; time elapsed since last stack test; results of that test and margin of compliance; condition of control equipment; and availability and results of associated monitoring data.

- The date and results (Pass/Fail) of all stack tests should be entered in the national air data base (AIRS/AFS, or its successor), and the High Priority Violations (HPV) status adjusted as appropriate.

V HIGH PRIORITY VIOLATIONS POLICY

· Facilities are to be in compliance with emission limitations at all times. Failing a stack test at any time is a violation for which appropriate enforcement action should be taken, including adjusting the facility's status to HPV consistent with the guidance. The guidance states:

> "The following criteria trigger HPV status. . . Violations that involve testing, monitoring, record keeping or reporting that substantially interfere with enforcement or determining the source's compliance with applicable emission limits. . . A violation of an allowable emission limit detected during a reference method stack test."

· Violations of emission limits for pollutants for which a facility is not designated as a "major" source may not rise to the level of HPV. The guidance addresses such circumstances by stating:

> "EPA expects that all violations of air pollution regulations, whether meeting the HPV criteria of not, will be addressed by the States, local agencies, or EPA."

· A facility that fails a stack test is required to document the failure, submit a report to the appropriate delegated agency, resolve the conditions that led to the failure, and test again.

VI CONDUCT OF STACK TESTS

· The focus of this guidance document is to address issues associated with the conducting of stack tests and the interpretation of the results. This guidance addresses the following major issues:

1. The Time Frame for Conducting Stack Tests
2. Stack Test Waivers
3. Notification of Stack Tests
4. Observation of Stack Tests
5. Representative Testing Conditions
6. Stoppages
7. Postponements
8. Test Reports

THE TIME FRAME FOR CONDUCTING STACK TESTS

· The primary issue is whether facilities can be granted an extension beyond the required time period to complete an initial stack test.

· The time frame for conducting initial stack tests is established in 40 C.F.R. Part 60.8 for New Source Performance Standards (NSPS); 40 C.F.R. Part 61.13 for National Emission Standards for Hazardous Air Pollutants (NESHAP); and 40 C.F.R. Part 63.7 for National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT). There are no regulatory provisions to extend the testing deadlines in any of these programs, regardless of the circumstances. As a result, a facility that has not completed a stack test within the requisite time frame would be in violation of the requirement to stack test and demonstrate compliance with the underlying standard. For example, under the NSPS program, a facility would be held in violation for failure to conduct an initial stack test within the first 180 days following startup or within 60 days after reaching maximum production rate, whichever is earlier.

· In addition to the requirement to conduct an initial stack test, a facility may be subject to testing requirements established in its operating permit or an enforcement document (e.g., Administrative Order, consent decree). Failure to conduct a stack test in accordance with the terms and time frames established in the permit or enforcement document would be a violation of the permit or enforcement document. In addition, the facility may be found to have violated the underlying regulatory requirement.

> - Section 113(a) of the CAA provides statutory authority to use any available information to prove CAA violations. Within the context of this situation, 40 C.F.R. §§60.11 and 61.12 allow an enforcement action to proceed based exclusively on any credible evidence. Data from the associated reference test method is not required. Evidence gathered by means other than a reference test can be considered when determining whether a facility would have been in compliance with the applicable requirements if the stack test had been conducted on a timely basis.

· If a facility fails to conduct a stack test within the required time frame, the only way for the delegated agency to legally grant additional time to conduct the test is through an enforcement action stemming from the failure to test.[1] This requirement applies regardless of whether the delegated agency determines that circumstances warranted the additional time. This ensures that a stack test ultimately is conducted and that the facility is capable of complying with the underlying regulatory requirements. The appropriate enforcement response will vary from

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[1] Please note that under EPA-approved State Implementation Plans (SIPs), some states may allow extensions of the deadline to conduct a stack test without the issuance of an enforcement order. This approach, however, is not applicable to requests for extensions of stack tests required by 40 C.F.R. Parts 60, 61, and 63.

state-to-state depending on enforcement authorities.

· Although the delegated agency is constrained by the requirement to issue an enforcement action when granting additional time to test, it does have the flexibility to take into consideration the circumstances contributing to the failure to test when determining the scope of the enforcement response. For example:

- A facility requests additional time to conduct an initial stack test because it realizes that it would fail the test for not being able to meet the underlying regulatory requirements. Additional time may be granted through an enforceable order. However, the failure to test is a violation of the requirement to test within the required time frame, and the facility's acknowledgment that it cannot comply is a violation of the underlying regulatory requirements. Penalties should be assessed consistent with the HPV Policy.

- A facility requests additional time to conduct an initial stack test because it is unable to obtain the maximum production rate within the start-up period. Insisting that the facility conduct the test within the required time frame may not be appropriate because the information obtained during the test would not be meaningful in determining compliance with the underlying requirements. Therefore, additional time may be appropriate. Failure to test within the required time frame under these circumstances is a violation of the requirement to test, but is not automatically considered a violation of the underlying regulatory requirements. The delegated agency should take into consideration a facility's unique circumstances when choosing an appropriate enforcement response.

- A facility fails to test within the requisite time frame as a result of equipment failure beyond the control of the facility, severe meteorological conditions, and/or safety considerations. Regardless, the facility is in violation of the requirement to test, and an enforceable order is required to grant additional time. However, the delegated agency may determine that the only necessary action on its part is the issuance of an order to test.

STACK TEST WAIVERS

· Stack tests to determine initial compliance may, in some instances, be the only test an emission unit will receive for an extended period of time. As a result, all identical emission units should be tested for initial compliance. The primary issue of concern with respect to waiver requests is whether stack tests to determine on-going compliance with emission limits should be waived for identical units.

· Although units may be identical in design, control devices and process operations may significantly alter their performance and ability to comply with the underlying regulatory

requirements on a continuing basis. Therefore, if the identical units have the ability to emit a pollutant in excess of the prescribed emission limit, a stack test should not be waived unless:

(1) the units are located at the same facility;
(2) the units are operated and maintained in a similar manner; and
(3) the delegated authority is satisfied that emissions from a representative sample of identical units at the facility are less than or equal to 50% of the applicable standard, and the facility can demonstrate the ability to comply with this margin of compliance on an on-going basis.

· If a facility does not have the ability to emit a pollutant in excess of the prescribed emission limit, waivers may be issued for both initial and on-going compliance stack tests. For example, a stack test waiver for identical units may be appropriate for a facility operating multiple natural gas-fired boilers subject to a particulate matter standard.

· Please note that waivers can be granted only by the appropriate delegated authority. See 40 C.F.R. §63.91(g). See also, "How to Review and Issue Clean Air Act Applicability Determinations and Alternative Monitoring," EPA 305-B-99-004, Section 4.2, pp.19-22 (February 1999). If the delegated state/local agency has the authority to approve a waiver, it still should consult with the Region to ensure national consistency.

NOTIFICATION OF A STACK TESTS

· The primary issue is what constitutes sufficient notification of a planned stack test under the regulatory requirements. Sufficiency is defined to include both the timing of the notification, as well as the content of the notification.

· Unless specified otherwise in the subparts, both the NSPS and NESHAP programs require at least thirty (30) calendar days notice of any initial stack test (40 C.F.R. §60.8(d) and 40 C.F.R. §61.13(a) and (c)), while the MACT program requires at least sixty (60) calendar days (40 C.F.R. §63.7(b)(1)). If for some reason the stack test must be delayed, facilities are also required to provide notification of the delay. The time frame for such notifications differs under each program. Under 40 C.F.R. §60.9(d), the facility is required to provide notification of the delay "as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated state or local agency) by mutual agreement." Under 40 C.F.R. §63.7(b)(2), if the facility must delay the test due to "unforeseeable circumstances beyond his or her control", the facility must notify the "Administrator as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled." 40 C.F.R. §61.13 does not address this issue.

· Generally, facilities are required to notify the EPA and the delegated agency of the delay. In some instances, however, facilities are only required to notify the delegated agency of the delay. Notification to EPA in addition to the delegated agency is dependent on individual delegations of these requirements. Written notification should be sent to the appropriate state/local agency and, if required, concurrently to the EPA Region. These minimum regulatory requirements should be met to allow the appropriate delegated agency the opportunity to review and revise the

testing protocol in advance of the stack test, and observe the test if the agency so chooses. The test date should be acceptable to both the delegated agency and the facility. If timely notification is not provided, the test results may be deemed unacceptable, and the source required to test again.

· For stack tests that are being conducted pursuant to requirements in an operating permit or an enforcement order, the time frame for notification may differ and be governed by the permit or order.

· Notification is not necessary if the stack test is being conducted for the facility's own benefit (i.e., not required by regulation, permit or enforcement order). However, if the facility fails such
a test and is a Title V major source, the facility must report the failure and submit the relevant test data to the delegated agency pursuant to the reporting requirements of Title V. At a minimum, the facility must report the failure as part of its quarterly deviation reports, semi-annual reports and annual compliance certification. This information must be entered by the delegated agency in the national data system as appropriate.

· At the time of notification, a test protocol should be submitted to the delegated agency for review and approval. The submission of a protocol prior to the stack test helps to ensure that the testing requirements are interpreted correctly and reference methods are followed; minimize potential problems encountered during the test; and reduce the possibility of testing errors. The format of such protocols may vary. However, certain basic elements should be addressed in a protocol to assist in national consistency, and ensure that a complete and representative stack test is conducted. For a prototype of a sufficiently detailed protocol, see Emission Measurement Center Guideline Document (GD-042), "Preparation and Review of Site-Specific Emission Test Plans," (March 1999) (www.epa.gov/ttn/emc/guidlnd.html).

· Test protocols should be maintained by the facility consistent with the statutory and regulatory requirements, and made available to the Regions, and state and local agencies upon request.

· If a facility wishes to deviate from a required test method, the facility would need to gain approval from the delegated authority in advance of the test. For purposes of the Parts 60 and 61 programs, changes are divided into two separate categories: "major" and "minor". Major changes must be approved by the EPA Office of Air Quality Planning and Standards (OAQPS), while minor changes can be delegated to state or local agencies. See Memoranda from Jack R. Farmer to Allyn M. Davis "Delegation of New Source Performance Standards Authority to States" (February 24, 1983); from Jack R. Farmer to David P. Howekamp "Delegation of NESHAP Authority to State/Local Agencies" (December 17, 1984) in "How to Review and Issue Clean Air Act Applicability Determinations and Alternative Monitoring,"

EPA 305-B-99-004, (February 1999). For examples of what constitutes major versus minor changes, see the above cited memoranda.

For purposes of Part 63, changes are divided into three categories: "major," "intermediate," and "minor". Major changes must be approved by the OAQPS, while minor changes can be delegated to state or local agencies. See 40 C.F.R. §63.91(g). For definitions of the three categories, see 40 C.F.R. §63.90.

The facility must receive prior written approval from the appropriate delegated authority. If the deviation is to be approved by a state or local agency, it should be in consultation with the EPA Regional office or as otherwise required by the delegation. See also "How to Review and Issue Clean Air Act Applicability Determinations and Alternative Monitoring," EPA 305-B-99-004, Section 4.2, pp.19-22 (February 1999).

The request to deviate from a required test method may be submitted as part of the testing protocol, and must document to the satisfaction of the delegated agency the requested change, and the rationale for the change.

· In addition to any deviations from the required test methods, the facility should document within the testing protocol any adjustments that will be made prior to the stack test such as tuning the burner or changing bags in a baghouse. If an agency representative is present to observe the test, the facility also should notify the observer of such adjustments before the test begins.

OBSERVATION OF STACK TESTS

· The major issue with respect to observing stack tests is whether a delegated agency should have an observer present for all stack tests, and if not, how often should the agency be present to observe the tests.

· There is no requirement that delegated agencies be present to observe all stack tests. However, whenever possible, given staffing and resource constraints, delegated agencies should observe the tests to ensure that the regulatory testing requirements are being met; the approved testing protocol is being followed; and the results are being accurately and completely recorded and documented in the test report. The presence of an observer also helps to reduce the likelihood of sample recovery and handling errors, as well as equipment errors, and to ensure that testing is conducted under the proper process conditions.

· If the delegated agency chooses not to observe the test, prior review of the testing protocol is even more critical to ensure that the test is conducted in such a manner so as to satisfy the regulatory requirements.

· If the delegated authority was not provided timely notification and an opportunity to observe the stack test, the resulting test data may be rejected and a new stack test required. If this situation prevents the facility from completing a valid stack test within the requisite time frame, the facility is in violation of the requirement to stack test and demonstrate compliance. However, if the facility provided timely notice and the delegated agency declined to observe the

test, the test results should not be rejected solely because the test was not observed by agency personnel.

REPRESENTATIVE TESTING CONDITIONS

· The NSPS and MACT programs require that performance tests be conducted under such conditions as the Administrator of EPA specifies based on the representative performance of the affected facility. The MACT program further defines representative performance as normal operating conditions. Operations during periods of startup, shutdown and malfunction do not constitute representative conditions for the purposes of a performance test. See 40 C.F.R. §§60.8(c) and 63.7(e). Individual standards may more specifically define conditions under which performance tests should be conducted. However, in the absence of such specifications, the question often arises as to what conditions should be used when conducting a stack test.

· Facilities are responsible for ensuring compliance with the emission limits under all conditions. Therefore, any stack test that is conducted must demonstrate that a facility is capable of complying with the applicable standards at all times. As a result, a facility should test under the most severe conditions that create the highest emissions. For example, if operating at maximum capacity would result in the highest levels of emissions, the facility should conduct a stack test operating at maximum capacity or allowable/permitted capacity. In addition, the facility should use the highest emitting fuel for the pollutant tested or as otherwise justified, and should process material that causes the highest emissions.

- If maximum capacity represents the most severe operating conditions, and the facility did not test at that level, the facility has not demonstrated its ability to comply with the underlying requirements at all times. Such a failure may necessitate a re-test. For example, if the facility tested at 90% of capacity but subsequently operated at 95%, a retest at 95% may be required.

- To avoid such a re-test, the burden is on the facility to demonstrate to the satisfaction of the delegated agency that it is capable of complying with the underlying regulatory requirements at all times. Such a demonstration may be made and a re-test avoided if, for example, the margin of compliance with the standard was large enough to demonstrate that compliance under the harsher, more adverse operating conditions, would be ensured.

· For certain facilities, operating at maximum capacity may not result in the highest emissions or lead to the most difficult conditions for the control device to achieve maximum efficiency. In such circumstances, the facility should test at whatever level of capacity results in the greatest emissions and is representative of their operations.

· If a facility does not operate at the level which represents the most severe conditions, the facility may test, upon approval of the delegated agency, at the level at which it operates. For

example, the highest emissions at a facility are created when that facility operates at 95% of capacity. However, the facility never operates above 85% of capacity. It is reasonable to allow the facility to test at 85% as long as the facility, to the satisfaction of the delegated agency, demonstrates that the facility does not operate above 85% capacity. Historical facility records may be used for the prove the facility's actual operating capacity.

· This guidance does not affect the ability of state/local agencies to prohibit a facility from operating at levels different from the level used during the stack test, or restrict production to reflect conditions equivalent to those present during the stack test.

Soot Blowing:

· Soot-blowing is the cleaning of heat exchanger surfaces by the use of steam or air to dislodge accumulated material such as ash. Current Agency guidance on this issue states that soot-blowing is a routine operation constituting representative process conditions. Therefore, soot-blowing should be included as an element of a comprehensive stack test.[2]

· Soot-blowing is "a normal part" of a facility's operations occurring at regular intervals. Emissions cannot be discarded as being the result of an upset condition, and it would be erroneous to stop soot-blowing for the purpose of conducting a stack test. See Memoranda from John S. Seitz to David Kee "Inclusion of Soot-Blowing Emissions in Subpart D Compliance Testing" (August 31, 1987); from Kathleen M. Bennett to Directors, Air & Waste Management Divisions "Restatement of Guidance on Emissions Associated with Soot-Blowing" (May 7, 1982); from Edward E. Reich to Sandra S. Gardebring "Representative Testing Requirements" (November 21, 1980).

· The above-referenced Agency determinations affirmed previous guidance which stated that emissions from soot-blowing are representative of a facility's operations and outlined the procedures for including soot-blowing while stack testing. See Memoranda from Edward E. Reich to Leslie Carothers "Integration of Soot-Blowing Emissions with Routine Operating Data for Existing Facilities"(March 12, 1979); from Edward E. Reich to Enforcement Division Directors, Air and Hazardous Material Division Directors, and Surveillance and Analysis Division Directors "NSPS Determination - Subpart D" (March 6, 1979).

STOPPAGES

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[2] Please note that under EPA-approved SIPs, some states may allow soot-blowing emissions to be excluded as an element of a comprehensive stack test. This approach, however, is not applicable to stack tests required by 40 C.F.R. Parts 60, 61, and 63.

· The issue is whether it is appropriate to stop a stack test once it has been started, and if so, under what circumstances.

· There are no regulatory provisions that would allow a facility to stop a stack test once it has been started. Depending on the circumstances surrounding the stoppage, the facility may be found in violation of the requirement to conduct a stack test, the underlying regulatory requirement, or both. For example:

- If a facility stopped the stack test because it was in jeopardy of failing the test, it would be considered in violation of both the requirement to conduct a stack test and to comply with the underlying regulatory requirement or permit condition. Consistent with 40 C.F.R. §§60.11 and 61.12, any credible evidence may be used to demonstrate non-compliance. For major sources, the test should be reported in the Title V quarterly deviation reports, semi-annual reports, and annual compliance certifications. In addition, the stoppage should be reported as a failure in the national data system, and an enforcement action should be initiated and penalties assessed consistent with the HPV Policy.

- If a facility is forced to stop a test due to equipment failure beyond its control, severe meteorological conditions, and/or safety concerns which would prevent the test from being completed in a safe and accurate manner, the facility should complete the test run underway, if possible, and fully document the reasons for the stoppage. The facility is required to reschedule the stack test prior to the regulatory deadline to avoid a violation of the requirement to test. The delegated agency should review both the documentation concerning the rationale for the stoppage and the partial stack test data to determine if a violation of the requirement to conduct a stack test and/or the underlying regulatory requirement occurred. If the delegated agency determines that a violation occurred, the stoppage should be reported as a failure in the national data system, an enforcement action initiated, and penalties assessed consistent with the HPV Policy.

POSTPONEMENTS

· The major issue is whether it is appropriate to postpone a stack test once it has been scheduled, and if so, under what circumstances.

· Postponements should be treated similar to stoppages. If a postponement results in the facility failing to complete the test within the required time frame, the facility is in violation of the requirement to test.

· Regardless of whether the postponement affects a facility's ability to test in a timely manner, the delegated agency should carefully scrutinize the circumstances surrounding the postponement to determine whether the facility was in violation of the underlying emission limitations, and therefore, postponed the test to avoid a documented violation. Consistent with 40 C.F.R. §§60.11 and 61.12, any credible evidence may be used to demonstrate non-

compliance.

TEST REPORTS

· The major issue is what information is needed to adequately document stack test results.

· The written test report should be sufficient to assess compliance with the underlying regulatory requirements or permit conditions, and adherence to the test requirements. When reviewing the test protocol, the delegated agency should identify for the facility any information that should be included in the final test report.

· Similar to the test protocol, certain basic elements should be addressed in a test report to document the testing conditions and results, and enable the delegated agency to determine whether a complete and representative stack test was performed. For a prototype of a sufficiently detailed test report, see Emission Measurement Center Guideline Document (GD-043), "Preparation and Review of Emission Test Reports," (December 1998) (www.epa.gov/ttn/emc/guidlnd.html). If the test report does not contain sufficient information with which to adequately review the testing process and data results, it is within the discretion of the regulatory agency to request additional information, or require another test if appropriate.

· A test report should be submitted to the regulatory agency as soon as possible after completion of the stack test and, at a minimum, in compliance with any underlying regulatory requirements. For stack tests being conducted pursuant to 40 C.F.R. Part 60, the test report is to be submitted within 180 days after the initial startup date or within 60 days after reaching maximum production rate. (§60.8(a)) For those tests being conducted pursuant to 40 C.F.R. Part 61, the test report is to be submitted within 31 days after completion of the test. (§61.13(f)) If the test is being conducted pursuant to 40 C.F.R. Part 63, the test report is to be submitted within 60 days after the test is completed. (§63.9(h)) In addition, all test reports should be maintained consistent with the requirements of the CAA and its implementing regulations, and made available to the Regions upon request.

Rounding of Significant Figures:

· For clarification on how the results of a stack test should be calculated and reported, this guidance defers to the current Agency guidance. See Memorandum from William G. Laxton and John S. Seitz to New Source Performance Standards/National Emission Standards for Hazardous Pollutants Compliance Contacts "Performance Test Calculation Guidelines" (June 6, 1990). After reiterating the established procedure concerning the use of the metric system in expressing compliance standards, the guidance states that all emission standards should have at least two significant figures and at least five significant digits are to be carried in intermediate calculations.
When rounding off the calculated emission numbers, the guidance affirms the practices of the American Society for Testing and Materials:

- If the first digit to be discarded is less than five, the last digit retained should not be changed. When the first digit discarded is greater than five, or if it is a five followed by at least one digit other than 0, the last figure retained should be increased by one unit. When the first digit discarded is exactly five, followed only by zeros, the last digit retained should be rounded upward if it is an odd number, but no adjustment made if it is an even number.

- For example, if the emission standard is 90, 90.357 would be rounded to 90, 90.639 would be rounded to 91, 90.500 would be rounded to 90, and 91.500 would be rounded to 92. See Laxton and Seitz, pp. 3-4.

VII REGIONAL ROLE

· As part of EPA's oversight responsibilities, EPA may observe stack tests whenever the Agency deems appropriate. The Agency also will review test reports as needed to verify that the tests are
being conducted properly, and that the results are being accurately interpreted and reported by state/local agencies.

· Consistent with CMS, the Regions will periodically conduct analyses to evaluate whether stack tests are being properly conducted and sufficiently and effectively utilized to determine compliance; and whether the results are being accurately reported in a timely manner.